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STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the matter of:	)	Docket No. 09-IEP-1A
	)	
Preparation of the	)	SCOPING ORDER FOR THE *2009*
2009 Integrated Energy Policy Report	)	*INTEGRATED ENERGY POLICY*
	)	*REPORT*

COMMITTEE SCOPING ORDER

In this order, the California Energy Commission's 2009 Integrated Energy Policy Report Committee (Committee) establishes the general scope and schedule for the *2009 Integrated Energy Policy Report (2009 IEPR)*. Commissioner Jeffrey Byron is the Presiding Member and Vice Chair James Boyd is the Associate Member of the Committee.

Background

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the Energy Commission to develop an *Integrated Energy Policy Report* (*IEPR*) every two years that includes assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission uses these assessments and forecasts to develop state energy policies that will conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. SB 1389 also directs other state government entities to use the information and analyses contained in the adopted IEPR to carry out their own energy-related duties and responsibilities.

The Committee held Scoping Hearings on April 28, 2008, and June 3, 2008, to discuss potential topics for the *2009 IEPR*. The topics identified in this Scoping Order reflect stakeholder input from those hearings. Other topics for the *2009 IEPR* were identified in the *2008 IEPR Update*, which was adopted by the Energy Commission on November 20, 2008.

Scope of the *2009 Integrated Energy Policy Report*

In the *2009 IEPR*, the Committee will evaluate overall supply and demand trends for electricity, natural gas, and transportation fuels, as well as issues associated with infrastructure, efficiency, reliability, and cost. The *2009 IEPR* will also address the following specific topics:

Electric System Reliability

Several factors are emerging that may adversely impact local system reliability including moving away from once-through cooling (OTC) in power plants; difficulty obtaining air permits, new greenhouse gas (GHG) considerations; with an overarching policy to retire old aging power plants. The effect is confounded by the interplay of these factors cumulatively.

Near-Term Reliability Issues

The State Water Resources Control Board (SWRCB) is pursuing regulations to restrict once-through cooling in California. Some owners may choose to retire plants rather than meet new requirements, and some of the retiring plants may need to be replaced with generation in the same area or with costly transmission upgrades to meet local reliability needs. The IEPR will explore implementing an OTC mitigation policy for existing generators that is integrated with planning and development of the replacement infrastructure necessary to support system reliability.

The recent Superior Court decisions voiding South Coast Air Quality Management District's (SCAQMD) Priority Reserve Rule and other related rules for repowering existing generation makes it unclear how some recently permitted projects, and any current and future power plant proposals, in the SCAQMD air shed would be permitted. Serious limitations will be placed upon power plant development in the South Coast Basin and nearby areas for some time. If this issue remains unresolved, new or repowered facilities will not be available to mitigate the reliability impacts of the proposed ban on OTC.

The *2009 IEPR* will address the following topics related to near-term electric system reliability:

- Evaluate the role of the state's aging power plants in providing local reliability to better understand the consequences of relying on aging plants and what attributes would be needed for replacement plants.
- Identify timely and least-cost strategies to comply with the SWRCB's rule on power plants that use OTC as well as what changes in power plant licensing, resource procurement, and transmission line siting processes may be necessary if these facilities are required to be retrofitted, repowered or retired by 2015 through 2021, as stated in the SWRCB's March 2008 proposed policy.
- Assess implications of the need to replace OTC capacity with preferred resources and dispatchable gas-fired resources to meet local capacity requirements, resource adequacy, and other electric grid reliability needs.
- Evaluate the impacts of potential air pollution limits (i.e. lack of available emission reduction credits from the "priority reserve" regulations) on new power generation in the SCAQMD and the effect of those limits on efforts to replace aging power plants.
- Evaluate publicly owned utility resource adequacy, including reviewing current and near-term energy and capacity supply portfolios.

Longer-Term Infrastructure Planning

In addition to the factors discussed under near-term system reliability, greenhouse gas reduction legislation (AB 32) calls for significant reductions in greenhouse gas emissions by 2020, and Executive Order S-3-05 sets a goal of reducing GHG emissions to 80 percent below 1990 levels by 2050. In its long-term infrastructure planning, the Energy Commission must assess the role of new fossil power plants in light of these goals, and how the new plants may

complement or compete with preferred ways of meeting electricity demand such as energy efficiency and load management programs, renewable energy, and distributed generation. At the same time, it is important in planning to consider the central role of new, efficient natural gas plants in preserving reliability in load centers, facilitating the retirement or repowering of old, inefficient plants, and replacing electricity that is currently provided through long-term coal contracts that will not be renewed. These considerations could introduce a different set of considerations for the types, function, and location of proposed new fossil power plants.

In addition, when examining infrastructure development the state will need to modernize its electricity system, compatible with key policies, while assuring reliable operation of the system.

The *2009 IEPR* will address the following topics related to longer-term infrastructure planning:

- Begin development of a conceptual "blueprint" that identifies the amount, performance characteristics, and location for electricity resources additions from 2010-2020 that implements previously established policy goals to rely primarily on renewables, energy efficiency, distributed generation and new transmission, as well as anticipated electrification of the transportation sector, between now and 2050, while maintaining overall system reliability.
- As part of that blueprint, assess the interaction of renewable and conventional resources, including the amount, location, and characteristics of new fossil-fuel generation that may be needed to firm up increased levels of renewables.
- Evaluate how the state's GHG mitigation program will affect power plant siting and outline a strategy for integrating multiple state policy goals in planning new energy infrastructure such as power plants and transmission lines.
- Develop long-term electricity demand forecasts (total consumption and retail sales) that are configured to meet the needs of the California Public Utilities Commission (CPUC) procurement proceeding and the California Independent System Operator transmission planning processes.

Electricity and Natural Gas Energy Efficiency

Efficiency continues to be the cornerstone of California's energy strategy for meeting new resource needs. California's building and appliance standards have saved consumers billions of dollars since 1978 and reduced the need for new power plants. In 2007, the Energy Commission adopted statewide energy efficiency targets for 2016 equal to 100 percent of economic potential, to be achieved by a combination of state and local standards, utility programs, and other strategies.

The CPUC also adopted initiatives in 2007 to make all new residential and commercial construction in California zero net energy by 2020 and 2030, respectively. In addition, in 2007 the Energy Commission established a proceeding to develop and adopt load management and demand response standards to help manage critical peak electricity use, and completed regulations for the second phase of the Home Energy Rating System.

The *2009 IEPR* will address the following topics related to energy efficiency:

- Discuss efforts needed to meet the adopted IEPR goal of 100 percent cost-effective energy efficiency, the CPUC's adopted efficiency goals, the Air Resources Board's (ARB) aggressive Scoping Plan goals, and the recommendations from the Energy Commission's Assembly Bill 549 report on reducing energy consumption in existing buildings, including

progress made toward meeting those goals for both investor-owned and publicly owned utilities.

- Discuss strategies to capture the significant potential for energy efficiency improvements in California's existing building stock as a major component of meeting the 100 percent cost-effective energy efficiency goal.
- Evaluate additional achievable energy efficiency and conservation measures and technologies as well as research and development needed to support the development and market penetration of these technologies.
- Refine the Energy Commission's demand forecasting models to improve the attribution of efficiency savings in those models and expand the models' capabilities.
- Use utility filings with the CPUC on measurement and evaluation studies to improve the accuracy and completeness of the Energy Commission's electricity demand forecast.
- Evaluate the Energy Commission's forecasting methodology and recommend improvements and potentially alternative approaches for forecasting energy consumption and efficiency impacts.
- Develop a capability to make projections of incremental impacts of energy efficiency goals relative to the energy efficiency already embedded in the baseline demand forecast.
- Discuss progress toward implementing load management and demand response standards, and research and development efforts in support of those standards.
- Describe efforts underway at the Energy Commission and elsewhere to support the goal of zero net energy homes and buildings.
- Discuss adopted implementation strategies for the Federal Energy Efficiency and Conservation Block Grant Program, which was established by the Energy Independence and Security Act of 2007 with the intention of reducing fossil fuel emissions, reducing total energy use, and improving energy efficiency in all energy sectors, including buildings.

Renewable Generation

Since 2002, California has had a mandate to increase the use of renewable generation to 20 percent of retail electricity sales by 2010. On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08, which raises California's renewable energy goals to 33 percent by 2020 and directs the Energy Commission and California Department of Fish and Game to streamline siting applications for renewable energy projects located in renewable development areas. The enhanced target will help California meet its aggressive GHG reduction target of 1990 levels by 2020 as well as the longer-term goal of 80 percent reduction of greenhouse gases from 1990 levels by 2050. However, accommodating higher levels of renewables will require changes in the way the current electricity system is designed and operated.

The *2009 IEPR* will address the following topics related to achieving higher levels of renewable electricity generation in California:

- *Transmission*

  The *2008 IEPR Update* identified transmission as the primary barrier to the development of renewable resources and meeting the state's renewable energy goals. The Renewable Energy Transmission Initiative (RETI) has been established to identify transmission projects needed to meet the state's renewable goals and to help overcome barriers to development of those projects. The Energy Commission's *Strategic Transmission Investment Plan,* prepared in each IEPR cycle, will complement the RETI efforts and will evaluate

transmission barriers, identify needed transmission projects, and provide a unifying vision for specific research and development needed to improve the state's transmission system.

The Energy Commission's *2009 Strategic Transmission Investment Plan* will:

- Identify and evaluate regulatory or policy changes that will reduce barriers to transmission projects, including joint investor-owned and publicly owned utility projects.
- Identify specific near-term transmission projects that will ensure reliability, relieve congestion, provide increased access to renewable generation, and meet future growth. This will include a discussion of system improvements needed to reduce local capacity requirements for fossil-fuel generation.
- Discuss federal and state corridor designation efforts to identify potential transmission corridors in advance of need to streamline future permitting of transmission lines needed to access top priority renewable resource zones.
- Discuss current transmission-related research and development and future efforts needed to help resolve transmission barriers, including the use of smart grid technologies.

- *Cost/Rate Impacts*

The *2008 IEPR Update* identified several issues surrounding the cost of achieving a 33 percent renewable target. The *2009 IEPR* will undertake the following activities to evaluate the cost impacts of higher levels of renewables:

- Estimate current conventional and renewable generation costs (both distributed generation and central station generation), and begin the assessment of future costs, including potential pricing shifts over time.
- Evaluate market trends.
- Review conclusions from other cost models, including the results of the CPUC's 33 percent Renewable Portfolio Standard (RPS) implementation analysis.
- Evaluate potential impacts of the 33 percent target on natural gas demand and prices.

- *Integration Issues*

The *2008 IEPR Update* discussed the difficulties in integrating large amounts of intermittent renewables into California's electricity system. These intermittent resources pose challenges to traditional reliability planning and resource adequacy requirements because they cannot currently be relied on to meet rapid changes in load and supply during peak hours and generally must be backed up with dispatchable resources.

The *2009 IEPR* will undertake the following activities related to renewable integration:

- Evaluate the status, potential, and research needs for new technologies, such as energy storage, or behavioral changes, such as demand response measures, to reduce grid impacts from increased renewable penetration.
- Identify research and development efforts on smart grid, energy smart communities, and distribution level renewables to facilitate and support increased integration of renewables resources.

- Identify the type and amount of dispatchable, firming generation necessary to satisfy energy needs and system reliability under various scenarios of renewable development.
- Discuss progress by the California Independent System Operator in identifying the amount of ramping and regulation needed to support 33 percent renewables by 2020.

- *Feed-in Tariffs*

  The *2008 IEPR Update* identified feed-in tariffs—essentially standardized contracts to sell energy delivered to the grid at a fixed price—as a potential mechanism to provide more financial certainty to renewable developers to help bring more renewable projects on-line quickly. The Energy Commission recommended that the CPUC immediately implement such tariffs for projects up to 20 megawatts (MW) in size, and that the Energy Commission and CPUC continue to evaluate the value of these tariffs for larger projects.

  The *2009 IEPR* will undertake the following on feed-in tariffs:

  - Build on information and analysis from the *2008 IEPR Update* on feed-in tariffs and report on progress implementing the IEPR recommendations.

- *Progress toward Renewable Portfolio Standard Goals*

  The *2009 IEPR* will undertake the following on RPS goals:

  - Review RPS eligibility criteria in light of the requirements for more renewable generation. Explore establishing a required MW target for distributed-scale renewables.
  - Summarize research and development activities, including needed innovation for emerging technologies, to achieve a 33 percent renewable goal at the lowest cost.
  - Provide an estimate of the amount of renewable energy needed to meet the 33 percent goal.

- *Progress toward Bioenergy Goals*

  Governor Schwarzenegger's Executive Order S-06-06 established targets for the use and production of biopower to address multiple state policy objectives and directed the Energy Commission to report in the IEPR on progress made to date in achieving sustainable biomass development in California. The *2009 IEPR* will undertake the following on bioenergy goals:

  - Discuss progress toward meeting 20 percent of the state's Renewables Portfolio Standard targets with biomass technologies and identify barriers to meeting that goal, including potential competition for feedstocks between the electricity and transportation sectors.
  - Report on ongoing activities and progress in identifying and securing federal and state funding for research, development, and demonstration projects to advance the use of biomass resources for electricity generation.

Distributed Generation and Combined Heat and Power

Assembly Bill 1613 (Blakeslee, Chapter 713, Statutes of 2007) requires the Energy Commission to adopt guidelines for combined heat and power systems by January 1, 2010, to optimize the

efficient use of waste heat, reduce waste energy, and be cost-effective, technologically feasible, and environmentally beneficial. In addition, the *2008 IEPR Update* identified distributed renewables as important in reducing load, contributing toward the state's zero-energy building goals, meeting GHG reduction targets, and bringing more renewable generation into the system.

The *2009 IEPR* will address the following topics related to distributed generation:

- Report on the status of the guidelines for combined heat and power systems required by AB 1613.
- Discuss the contribution of distributed resources to meeting the state's zero-energy building goals, including the costs and implications of requiring renewable distributed generation on new homes.
- Summarize existing research and development efforts to address technical and economic barriers, as well as capitalize on the benefits, of distribution-level and building-integrated distributed generation (conventional and renewable). Identify additional research and development needs.
- Explore the establishment of distributed generation and combined heat and power goals, based on local reliability benefits, greenhouse gas reduction, and other benefits.

Nuclear Plants

In 2008, the Energy Commission adopted *An Assessment of California's Nuclear Power Plants: AB 1632 Report*, as required by Assembly Bill 1632 (Blakeslee, Chapter 722, Statutes of 2006), which made recommendations on nuclear-related efforts for the *2009 IEPR*.

The *2009 IEPR* will address the following topics related to the state's nuclear power plants:

- Report on the utilities' progress in implementing the recommendations contained in the AB 1632 report.
- Discussion of progress made in working with the CPUC to develop a plan for reviewing the costs and benefits of nuclear plant license extensions, determine the scope of evaluation of extensions, and the criteria for assessment.
- Evaluate uncertainties of the effects of outages at the nuclear plants and what modifications may be needed in long-term planning and procurement processes to ensure that replacement resources are acquired in a timely way.
- Report on the status of federal nuclear waste disposal/management programs and federal efforts to establish a waste repository at Yucca Mountain.

Power Plant Siting

The Energy Commission is responsible for licensing thermal power plants 50 MW and above to ensure that new energy facilities are reliable, and environmentally acceptable. Executive Order S-14-08 also establishes a Renewable Energy Action Team consisting of the Energy Commission and the Department of Fish and Game that will lead efforts to streamline the permitting of renewable energy and assist developers in designing projects that minimize environmental impacts.

The Energy Commission has also initiated a proceeding to investigate whether proposed power plants have a significant adverse environmental impact from their greenhouse gas emissions and if so, how to mitigate such impacts.

Further, on June 4, 2008, Governor Schwarzenegger issued Executive Order S-06-08, which strongly encouraged local water agencies and districts to "work cooperatively on the regional and state level to take aggressive, immediate action to reduce water consumption locally and regionally for the remainder of 2008 and prepare for potential worsening water conditions in 2009."

The *2009 IEPR* will address the following topics related to licensing power plants, implementing the provisions of Executive Order S-14-08, and current water use policies for power plants:

- Discuss the progress of the Energy Commission's information proceeding (08-GHG-OII-01) to determine whether proposed power plants have a significant adverse environmental impact from their greenhouse gas emissions, and if so, how to mitigate such impacts.
- Report on progress and next steps in implementing Executive Order S-14-08, including:
    - Identify and define top priority renewable development areas in the state that can be developed reliably, cost-effectively, and with least environmental impact, as well as areas where habitat conservation plans should be developed based on renewable energy development potential.
    - Develop a Best Management Practices Manual that emphasizes siting considerations and minimizing environmental impacts for desert projects to assist renewable project applicants in project design.
    - Develop a Renewable Transmission Development Report that identifies potential routes and interconnection points for new transmission lines to access renewable development areas.
- Evaluate how air permits restrictions will impact siting decisions.
- Review the Energy Commission's current power plant water use policy, and evaluate all industrial water uses at power plants.

Natural Gas

The *2008 IEPR Update* identified the need for further evaluation of the impacts on natural gas demand and price from expected changes in the overall resource mix of the Western Interconnection in response to Western and national strategies to address GHG emissions, and the need to better understand physical changes to natural gas supply, delivery, and storage systems to support this new reliance upon natural gas.

The *2009 IEPR* will undertake the following efforts related to natural gas:

- Evaluate pricing uncertainties and implications for a range of future policy choices by reviewing studies and assessments by other entities of natural gas supply, demand, price, and infrastructure uncertainties, as well as different methods and models used in natural gas market assessments.
- Identify potential physical changes in the natural gas system, including storage, to respond to variable output expected from some renewable resource generation technologies through the cycling of natural gas-fired generation to back up intermittent renewable resources.
- Assess natural gas supplies over a 10-year time horizon, including a review of natural gas basins, pipelines, proposed liquefied natural gas facilities, and infrastructure to deliver gas to the western U.S.
- Discuss natural gas research and development efforts needed to reduce greenhouse gas emissions and natural gas use, particularly in the industrial sector.

Transportation

Transportation accounts for nearly 40 percent of all greenhouse gas emissions in California. Increasing the use of alternative and renewable transportation fuels, improving vehicle fuel economy, and reducing vehicle miles traveled are key strategies in meeting the state's goals to reduce transportation energy use and meeting the state's 2020 and 2030 greenhouse gas emissions goals.

The *2009 IEPR* will address the following topics related to transportation energy:

- *Progress toward State Alternative Fuels Plan Goals*

  Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005) required the Energy Commission to prepare a state plan to increase the use of alternative fuels in California. The plan was jointly adopted by the Energy Commission and Air Resources Board in December 2007, and contains recommendations to stimulate the use and production of alternative and renewable transportation fuels and vehicle technologies in California. The plan also identified goals for the use of alternative and renewable fuels in the on-road and off-road sectors (excluding air, rail, and marine), including, but not limited to, electricity, natural gas, propane, hydrogen, ethanol, renewable diesel, and biodiesel, of 9 percent by 2012, 11 percent by 2017, and 26 percent by 2022. Lastly, the plan presented a "2050 Vision" and provides a plausible foundation for building a potential multi-fuel transportation energy future scenario for California by 2050.

  The *2009 IEPR* will:

  - Review the state-of-the-art of full fuel cycle analyses, including indirect land use changes.
  - Describe progress in achieving the alternative and renewable fuel goals identified in the State Alternative Fuels Plan, including progress toward the "2050 Vision" identified in the plan.
  - Assess the availability of alternative and renewable feedstocks and fuels.
  - Identify research, development, and demonstration on emerging fuels and vehicle technologies needed to achieve the longer term vision.

- *Alternative Renewable Fuel and Vehicle Technology Program*

  Assembly Bill 118 (Nuñez, Statutes of 2007, Chapter 750) directed the Energy Commission to develop the Alternative Renewable Fuel and Vehicle Technology Program. The statute, subsequently amended by AB 109 (Nuñez, Statutes of 2008, Chapter 313), authorizes the Energy Commission to fund projects to develop and deploy innovative technologies that will transform California's fuel and vehicle types to help attain the state's climate change policies. The emphasis of this program is to deploy alternative and renewable fuels in the marketplace, without adopting any one preferred fuel or technology.

  The *2009 IEPR* will:

  - Report on the status of efforts to implement the Alternative Renewable Fuel and Vehicle Technology Program.

- *Progress toward Biofuels Goals*

  In 2006, the Energy Commission adopted the *Bioenergy Action Plan* to "maximize the contributions of bioenergy toward achieving the state's petroleum reduction, climate change, renewable energy, and environmental goals." The plan contains recommended in-state

production targets of 20 percent of biofuels used in California by 2010, 40 percent by 2020, and 75 percent by 2050. Governor's Executive Order S-06-06 established these production targets, charged the Energy Commission, along with other commissions and departments, to identify and secure funding for research, development, and demonstration projects to advance the use of biofuels for transportation and directed the Energy Commission to report in the IEPR on progress made to date in achieving sustainable biomass development in California.

The *2009 IEPR* will:

- Discuss progress toward meeting the in-state biofuels production goals, including potential competition for feedstocks between the transportation and electricity sectors.
- Report on ongoing activities and progress in identifying and securing federal and state funding for research, development, and demonstration projects to advance the use of biofuels for transportation.
- Review and recommend needed changes to the definition of "renewable biomass" for purposes of measuring progress toward these goals.

- *Transportation Fuels Supply, Demand and Infrastructure*

  California needs a robust transportation fuel infrastructure to import, produce, store, and distribute crude oil, renewable feedstocks, blending components, and gasoline, diesel, alternative and renewable fuels to reliably meet the state's increasing demand for transportation energy.

  The *2009 IEPR* will:

  - Develop transportation fuel price forecasts, and fuel demand forecasts for light-duty vehicles, freight, transit and aviation sectors.
  - Develop transportation fuel supply/demand balances, and forecasts of import infrastructure requirements.
  - Assess the adequacy of the transportation fuel infrastructure and the need for modifications to provide a reliable supply of petroleum fuels and to increase the use of alternative and renewable fuels.

Land Use and Local Government Support

The *2007 IEPR* focused attention and made recommendations on the need to establish a strategic planning process with local governments and regional planning organizations to identify and reduce energy and greenhouse gas emissions through facility energy efficiency and land use planning. Since the publication of the *2007 IEPR*, the state has made progress in tying local and regional planning efforts to energy and GHG reductions.

Significant state legislation, in the form of SB 375 and SB 732 (Steinberg, Statutes of 2008) were signed by the Governor. In addition, the California Department of Transportation's Regional Blueprint Planning Program is helping local agencies and stakeholder groups collaborate on smart growth goals. Further, the ARB's Scoping Plan lays out an aggressive vision for avoiding GHG emissions through local government land use decisions, and local governments and regional agencies have themselves taken the lead in reducing energy and GHG emissions through individual and collective action.

The *2009 IEPR* will:

- Evaluate the impacts of state-level policy and legislative changes, since publication of the *2007 IEPR*, on local decision-making related to land use, energy consumption, and climate change. Particular focus will be on the role the Energy Commission can play in statewide land use, energy, and GHG policy and coordination.
- Examine how state-level policies, programs and actions can assist local decision-makers in implementing and promoting energy and GHG emission efficient developments.
- Examine how local governments can contribute to energy efficient land use planning and be energy/water/resource-efficient. This will include exploring strategies to encourage more infill development in existing communities as well as energy and resource efficient material production and design approaches.
- Identify the need for research activities to support implementation of SB 375 and other state land use policy goals.

Energy and Climate Change

In support of the ARB, the Energy Commission and the CPUC initiated a collaborative proceeding to develop and provide recommendations to the ARB on measures and strategies for reducing GHG emissions from the electricity and natural gas sectors. This proceeding resulted in the *Final Opinion on Greenhouse Gas Regulatory Strategies*.

The state has committed to significant efforts to mitigate climate change. However, climate change may still seriously impact the energy sector in California. Governor Schwarzenegger has recognized the importance of developing robust climate change adaptation strategies. Executive Order S-13-08 directs the California Resources Agency, through the Climate Action Team, to coordinate with local, regional, state and federal public and private entities to develop a state Climate Adaptation Strategy.

Climate impacts affect energy supply and demand and virtually all aspects of related infrastructure including fuels (conventional and renewable), transport, conversion, delivery and use. Warmer temperatures will increase summer air conditioning loads and affect transmission operations, while changes in snowpack levels and precipitation will affect the availability of hydroelectric power and availability of renewable fuels. In addition, there could be potential impacts on refineries, power plants, transportation infrastructure, transmission lines, petroleum and natural gas pipelines, and storage facilities from rising sea levels, higher temperatures, increased frequency of wildfires, and extreme weather events.

The *2009 IEPR* will address the following climate *mitigation* activities:

- Evaluate ongoing necessary needs for analysis and need in implementing the *Final Opinion on Greenhouse Gas Regulatory Strategies*.
- Report progress on achievement of AB 32 goals for the energy sector.

The *2009 IEPR* will address the following climate *adaptation* activities:

- Discuss the vulnerability of electricity, natural gas, and transportation infrastructure resulting from warming temperatures, wildfires, sea level rise and severe weather events.
- Provide an overview of how climate change may impact the electricity sector, including potential changes in electricity demand in California as a result of warmer temperatures, the availability of hydroelectric generation from California and the Northwest, and the availability of renewable resources, including bio-energy, wind, and solar.

- Discuss interagency coordination activities and identify further research and development efforts needed to refine: 1) climate change impacts at a scale and resolution needed for resource/infrastructure planning and 2) other analytical tools critical for developing robust adaptation strategies in the energy sector.

2009 Integrated Energy Policy Report Schedule

The Committee directs the staff to use the following general schedule of key milestones:

2009 IEPR	
Issue Order Instituting Informational Proceeding for *2008 IEPR Update* and *2009 IEPR*	April 16, 2008
Scoping hearing for *2009 IEPR*	June 3, 2008
Issue IEPR Committee Scoping Order for *2009 IEPR*	January 9, 2009
Staff and Committee workshops and hearings on specific topics	January – July 2009
Issue *Committee Draft 2009 IEPR*	September 2009
Committee hearing on *Draft 2009 IEPR*	October 2009
Issue *Committee Final 2009 IEPR*	November 2009
Business Meeting adoption	November 2009

Dates and notices for specific workshops and hearings will be posted on the Energy Commission's IEPR webpage as they are finalized. Public notices for each workshop and hearing will be posted and also sent to the electronic server list for the *2009 IEPR* and associated key topic proceedings. Notices and documents for these proceedings are posted to the Energy Commission website at [http://www.energy.ca.gov/2009_energypolicy/index.html]. When new information is posted, an e-mail will be sent to those on the energy policy e-mail list server. The Committee encourages those who are interested in receiving these notices to sign up for the list server through the website [http://www.energy.ca.gov/listservers/index.html].

Participation in the Integrated Energy Policy Report Proceeding

The policy recommendations contained in the *2009 IEPR* will be based on the record developed during the proceeding, including data and technical analyses by the staff and other parties. Analysis and information developed in other proceedings at the Energy Commission and by other agencies will be incorporated as appropriate. Parties are directed to use the IEPR subdockets listed below when submitting information for the Committee's consideration.

09-IEP-1A – General/Scope
09-IEP-1B – Electricity Resource Plans
09-IEP-1C – Electricity Demand Forecast
09-IEP-1D – Transmission Planning
09-IEP-1E – Cost of Generation
09-IEP-1F – Energy Efficiency/Demand Response
09-IEP-1G – Renewables
09-IEP-1H – Distributed Generation
09-IEP-1J – Natural Gas Supply, Demand, Price
09-IEP-1K – Transportation Fuels and Infrastructure
09-IEP-1L – Nuclear Issues

09-IEP-1M – Research and Development
09-IEP-1N – Land Use Issues

The Committee encourages the active participation of all interested and affected parties to ensure a complete and thorough evidentiary record. As in previous proceedings, the Committee recognizes that close coordination with federal, state, local, tribal, and other agencies is critical to identifying and addressing energy infrastructure and related environmental challenges. The Committee directs staff to continue working with these agencies to ensure their participation in this proceeding.

The Energy Commission's Public Adviser, Elena Miller, provides the public assistance in participating in Energy Commission activities. If you want information on how to participate in this proceeding, please contact the Public Adviser's Office at (916) 654-4489 or toll free at (800) 822-6228, by FAX at (916) 654-4493, or by e-mail at [PublicAdviser@energy.state.ca.us].

News media inquiries should be directed to the Media and Public Communications Office at (916) 654-4989 or by e-mail at [mediaoffice@energy.state.ca.us]. Technical questions should be directed to Suzanne Korosec, Assistant Director of Policy Development, at (916) 654-4516 or by e-mail at [skorosec@energy.state.ca.us].

JEFFREY D. BYRON
Commissioner and Presiding Member
Integrated Energy Policy Report Committee

JAMES D. BOYD
Vice Chair and Associate Member
Integrated Energy Policy Report Committee

Note: The California Energy Commission's formal name is State Energy Resources Conservation and Development Commission.